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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,487	10/29/2001	Robert Burgess	10015534	7488

7590 03/11/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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RUGGLES, JOHN S

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

10/055,487

Applicant(s)

BURGESS, ROBERT

Examiner

John Ruggles

Art Unit

1756

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.


The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 36.

Claim(s) objected to: \_\_\_\_\_

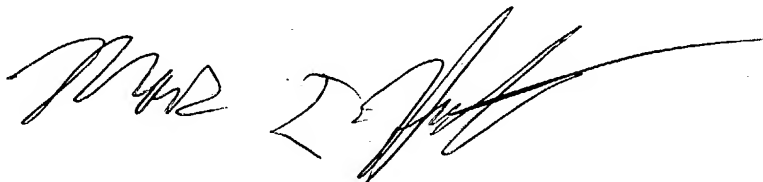
Claim(s) rejected: 1-7,22,23,25-35 and 37-45.Claim(s) withdrawn from consideration: 8-21,24,46 and 47.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

  
John Ruggles  
Examiner  
Art Unit 1756

Continuation of 3. Applicant's reply has overcome the following rejection(s): formal rejections of (1) claims 1-7, 22-23, and 25-45 under the first paragraph of 35 U.S.C. 112 and (2) claim 45 under the second paragraph of 35 U.S.C. 112 due to applicant's amendments and corresponding arguments. It is still not clear why the term "uniform" has been used in several previously presented claims rather than terms that are more clearly supportable by the original specification (e.g., desired thickness, etc.). Nevertheless, in view of applicant's arguments on page 17, it is now the examiner's position that a computer controlled supply unit for depositing building material at a desired specified thickness would be expected to have the capability of providing a uniform coating, even though uniformity of this coating was not specifically required by the original disclosure.

Continuation of 5. does NOT place the application in condition for allowance because: (1) contrary to applicant's arguments on pages 18-19 of the reply of 23 February 2004, the instant "scanning the layer using a plurality of light emitting centers" of claim 1, etc. is still believed to be obvious over the combination of (a) Batchelder's scanning of deposited building material with "a plurality of laser diodes" (column 9 line 58) and (b) Lawton's subsequent curing of previously deposited building material by laser diode imaging (column 14 line 49, column 15 lines 1-3, and column 16 line 33); (2) in response to the argument on page 20 regarding claim 22, etc., (a) Batchelder describes alternative use of a nozzle applicator having three or more degrees of movement, which may make movement of the table unnecessary (column 6 lines 25-28) and further suggests that rules for placement of each deposited layer formed from extruded and cured building material can ensure maximum smoothness of each layer before deposition of the next successive layer (column 13 lines 31-51) and (b) Lawton further shows use of a sliding doctor blade to uniformly spread the building material before imaging (column 6 line 52 to column 7 line 20), both of which were combined for the reasons previously set forth to render these instant claims unpatentable -- therefore, the previous obviousness rejections have NOT been overcome by applicant's arguments and remain as previously stated; (3) pages 21-22 assert that the combination of the foregoing references with Gelbart, Lin, and Mercer lacks the instant aspect of using a transport system to transport the article between the applicator and the curing oven, but (a) Gelbart teaches fabrication of three-dimensional objects using plural laser diodes for selective curing of a building material layer-by-layer in which the initial curing of successive layers is followed by oven baking or UV exposure for further curing and washing to remove uncured building material (column 4 line 53 to column 5 line 35) - so Gelbart reinforces the previous combination by subsequent oven baking while adding the rinsing or washing aspect of instant claims 6-7 and 23, (b) Lin's Figure 2 shows a transport system of advancing devices 35 for the substrate between various treatment stations including applicator region(s) (ink jet printer head(s)) and conventional heaters (e.g., lamps, laser diodes, etc., column 11 lines 13-46) in which the transport system is interpreted to be programmable or automated in order to be operated in concert with the applicator(s) and separate heaters, and (c) Mercer provides further support for use of an automated transport means for controlled coordination with an ink jet printing head applicator (abstract, Figure 1, and column 4 lines 35-51) -- so this combination overcomes applicant's arguments and the rejection of claims 25-34 still stands; (4) Seki's Figure 24 embodiment of a recording head showing ink jet head orifices OF1-OF8 integrally mounted in the same "carriage" CA as light emitting diodes LE1-LE4 is viewed as analogous to having these elements in the same modified ink jet cartridge, so applicant's arguments on pages 23-24 have also failed to distinguish instant claims 35 and 37-41 over the cited prior art of record; and (5) regarding the remaining arguments on pages 25-26, (a) the light focusing or baffling devices located at the applicator printing orifice plate of instant claim 3 is sufficiently taught by Batchelder's laser or radiant lamp having an associated focusing reflector or baffle coupled to the applicator nozzle orifice (column 7 lines 12-22) and use of a plurality of laser diodes for curing as pointed out above and (b) the remaining arguments regarding claims 4-5 and 29 have either been previously addressed or were presented for the first time after final making it unclear why they could not have been presented earlier during prosecution. Also, applicant's request on page 16 that apparatus claims 46-47 be examined with the process is not well taken, especially since applicant has previously elected the process over the apparatus WITHOUT traverse. Moreover, in contrast to applicant's suggestion, it is noted that apparatus claim 47 differs significantly from process claim 26 and would require further consideration, placing an undue burden on the examiner.



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